

“The journey to excellence is slowed by thinking you have already arrived.....”

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We are...

- ◉ A 20 bed CAH with a three bed ED
- ◉ We serve 6,219 residents of Pondera County
- ◉ 1,622 square miles of area
- ◉ 1 ALS transporting EMS agency (hospital based)
- ◉ 1700 ED visits and ~280 EMS calls per year
- ◉ 112 Mercy Flight/EMS transfers in 2014
- ◉ TRF since 2008

Some of our processes...

- ◉ Early and Aggressive transfer to higher levels of care
- ◉ Involvement in CRTAC
- ◉ ATLS/CALS Certification of our ED Providers
- ◉ Airway management equipment refinement
- ◉ RSI kit simplification
- ◉ Early adoption of TXA, backboard avoidance strategy and video laryngoscopy

Evacuation....We call early and often

As soon as we recognize the potential for pathology for which we are not equipped to provide definitive care, We Call.

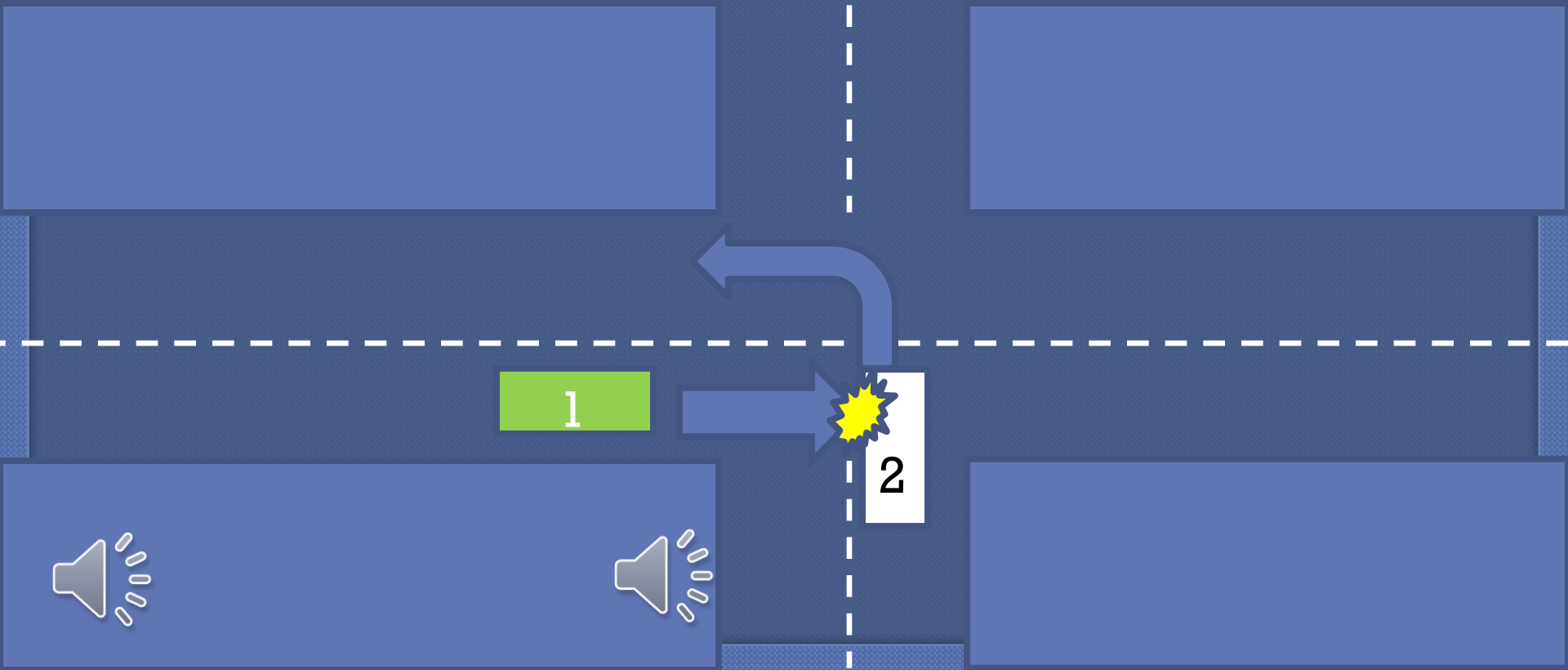


Engaging staff in the trauma program

- ◉ Look at outcomes-policies-standards
- ◉ Keep it patient focused
- ◉ Staff development for success-trauma quiz
- ◉ Build Team-Scavenger hunt
- ◉ Education and feedback
- ◉ Staff involvement in quality data abstraction and trauma registry

What happened?

- Two vehicle MVC-
- 4 people per car-
- Driver #2 stopped and then proceeded through intersection and was T-boned by oncoming car #1 at highway speed

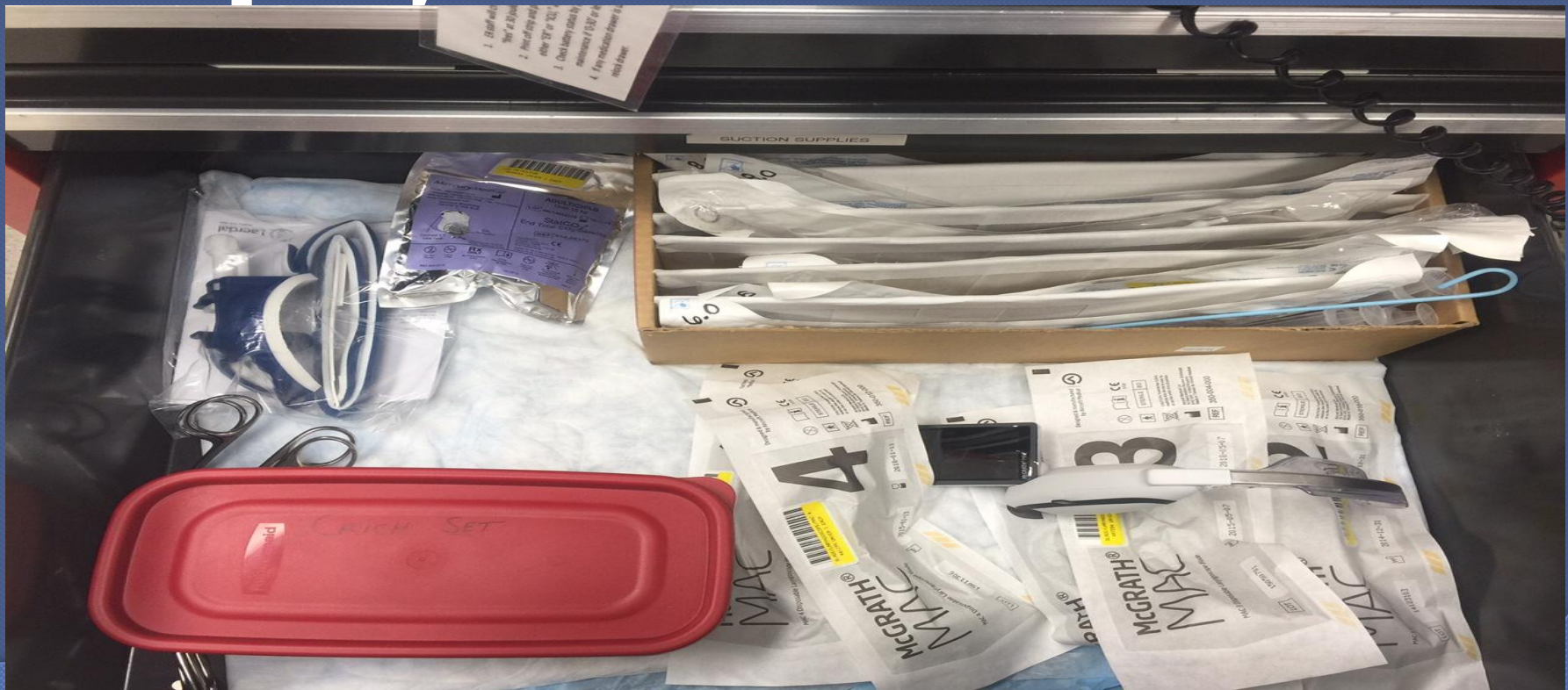


What went well and what didn't go well

- ◉ Staff communicates with Trauma Coordinator within 24 hours
- ◉ Post event team huddle
- ◉ Brainstorm with staff involved for their solution to improve the process
- ◉ Discuss at Trauma Committee/Staff Meetings
- ◉ Resource enhancement
- ◉ Implement process change and educate staff

Airway Management

- Video laryngoscopy with no change in traditional mechanics.
- Simplicity



RSI...Simplify

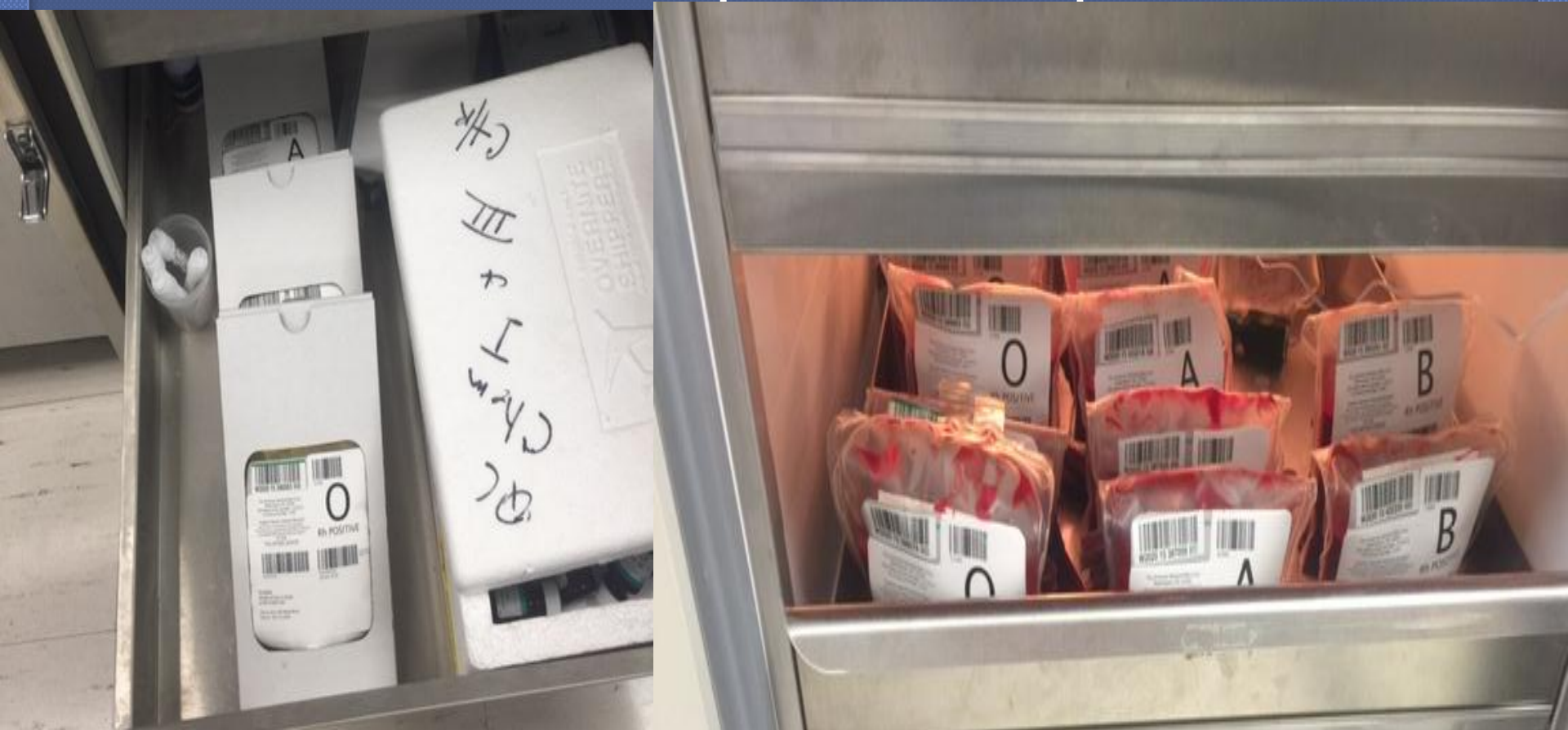
- A 99% solution

Rocuronium Dosing (1.2mg/KG) 10mg/ml				
5KG 0.6ML	10KG-1.2ML	15KG-1.8ML	20KG-2.4ML	25KG-3ML
30KG-3.6ML	35KG-4.2ML	40KG-4.8ML	45KG-5.4ML	50KG-6ML
60KG-7.2ML	70KG-8.4ML	80KG-9.6ML	90KG-10.8ML	100KG-12ML
Succinylcholine Dosing (1.5mg/kg) 20mg/ml				
5KG-0.4ML	10KG-0.8ML	15KG-1.2ML	20KG-1.5ML	25KG-1.9ML
30KG-2.3ML	35KG-2.7ML	40KG-3ML	45KG-3.4ML	50KG-3.8ML
60KG-4.5ML	70KG-5.3ML	80KG-6ML	90KG-6.8ML	100KG-7.6ML
Etomidate Dosing (0.3mg/kg with 2mg/ml)				
5KG 0.75ML	10KG-1.5ML	15KG-2.25ML	20KG-3ML	25KG-3.75ML
30KG-4.5ML	35KG-5.25ML	40KG-6ML	45KG-6.75ML	50KG-7.5ML
60KG-9ML	70KG-10.5ML	80KG-12ML	90KG-13.5ML	100KG-15ML



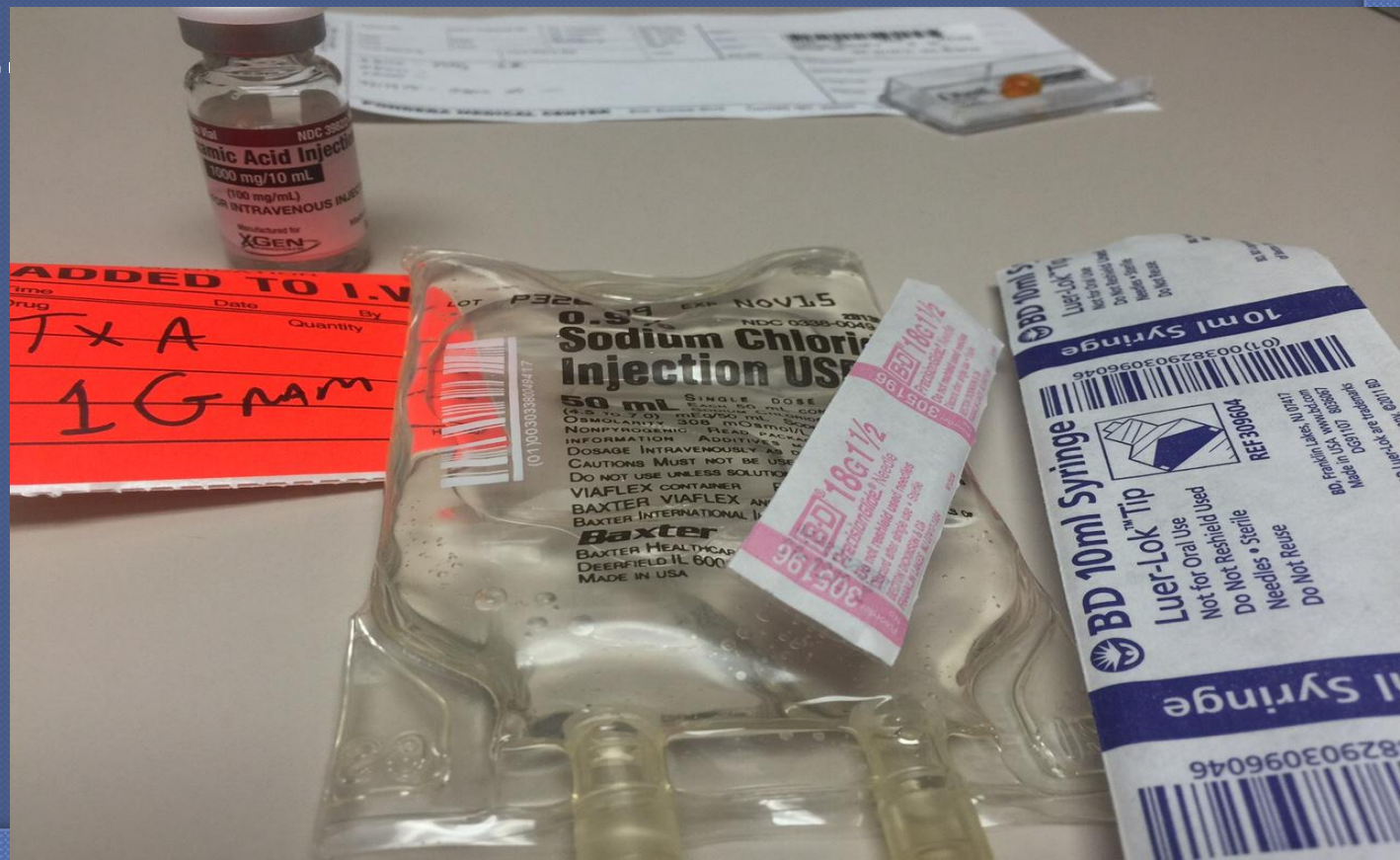
Balanced Resuscitation

- PRBC and FFP
- Acute transfusion protocol-rapid infuser



TXA

- Safe and Easy...and the earlier the better.
Approved for Paramedics based on local protocol



How we do “The Designation”

- They come for two reasons:
 1. To insure the standard is met
 2. To help us improve our ability to provide care.
- We try to make it easy to find the required criteria-color coded book
- This gives them more opportunity to coach and thoroughly analyze our deficiencies.
- The more time they have for step two, the better we can help our patients in the future.

"The Book"

CONFIDENTIAL TRAUMA RECEIVING FACILITY Designation Performance Improvement Report

FACILITY: _____
LOCATION: _____
DATE: _____

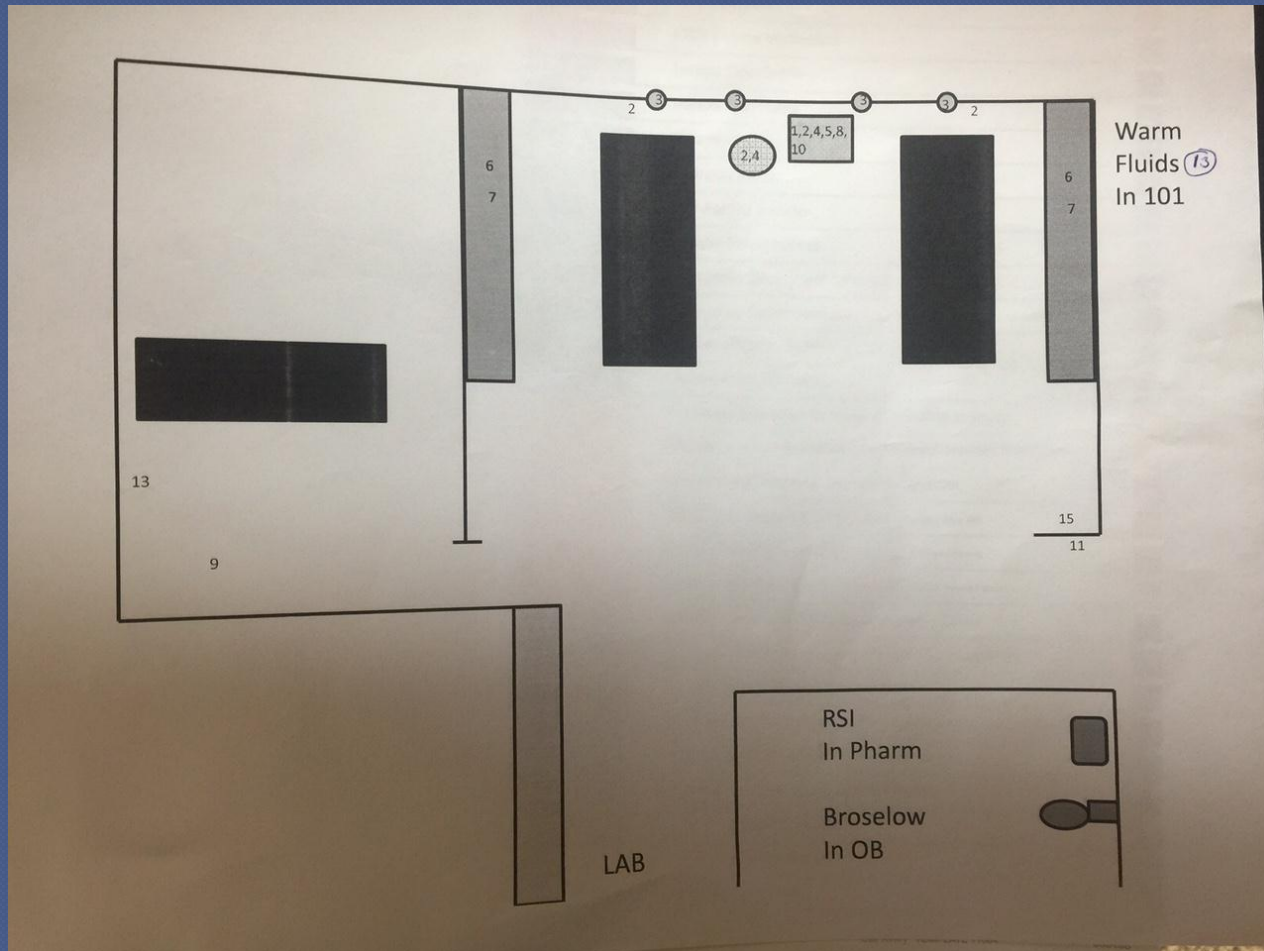
Requirement	Resource Criteria	Compliance		
		A	B	C
FACILITY ORGANIZATION				
1	Resolution The board of directors, administration, and medical, nursing and ancillary staff shall make a commitment to providing trauma care commensurate to the level of categorization for which the facility is applying for.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Trauma System Participation in the statewide trauma system including participation in Regional Trauma Advisory Committee with support and participation in regional and state trauma performance improvement programs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Trauma Program Multidisciplinary program that coordinates trauma-related activities including quality-performance improvement for trauma patients, educational programs for providers of trauma care, injury prevention, and public education.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Trauma Team A team of care providers is to be identified and have written roles and responsibilities to provide initial evaluation, resuscitation and treatment for all trauma patients meeting trauma system triage criteria. Written trauma system triage criteria to activate the trauma team must exist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Trauma Medical Director Physician, Nurse Practitioner, or Physician Assistant with a special interest in trauma care who leads the multidisciplinary activities of the trauma program. The trauma director should have the authority to affect all aspects of trauma care including oversight of clinical trauma patient care, development of treatment protocols, coordinating quality-performance improvement, correcting deficiencies in trauma care, and verification of continuing trauma education.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Completion of an ATLS course with preference for current verification or being an ATLS instructor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Trauma Coordinator A registered nurse or alternately a qualified allied health personnel working in concert with the trauma director, with responsibility for organization of services and systems necessary for a multidisciplinary approach to care for the injured. Activities include clinical care and oversight, trauma education and prevention, quality-performance improvement, trauma registry, and involvement in community and regional trauma system. There must be dedicated hours for this position.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Trauma Committee Trauma Program Performance functions with a multidisciplinary committee of all trauma related services to assess and correct global trauma program process issues. This committee meets regularly, takes attendance, has minutes, and works to correct overall program deficiencies to optimize trauma patient care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Trauma Peer Review Functions with a multidisciplinary committee of medical disciplines involved in caring for trauma patients to perform peer review for issues such as response times, appropriateness and timeliness of care, and evaluation of care priorities. This committee under the aegis of performance improvement meets regularly, takes attendance, has minutes, and documents how patient care problems will be avoided in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REQUIREMENT
E - Essential Criteria for designation of this level of trauma center
D - Desired Criteria are not required for designation but considered desirable

COMPLIANCE
A - Not Initiated / B - Being Developed / C - Compliant

1	Resolution
2	Trauma System
3	Trauma Program
4	Trauma Team
5	Trauma Medical Director
6	ATLS Course Verification
7	Trauma Coordinator
8	Trauma Committee
9	Trauma Peer Review
10	Diversion Policy
11	Inter-Facility Transfer
12	Disaster Preparedness
13	Emergency Department Coverage (Physician, PA, or NP)
14	Emergency Department (Providers Qualified to Initiate Resuscitative Measures)
15	Early Notification System of On-Call Providers
16	Current ATLS Verification
17	Continued Education for Medical Providers in the ED
18	Attendance of Multidisciplinary Peer Review Committee Meetings
19	Designated Emergency Department Director
20	Emergency Department Coverage (Physician, PA or NP)
21	Nursing Availability (To Provide Immediate Care of Trauma Patient)
22	Nursing Personnel (To Provide Continuous Monitoring of Trauma Patient)
23	Nursing Continuing Education (Trauma-Related Education)
24	Acute Hemodialysis - (Transfer Agreement with Regional Trauma Center)
25	Transfer Agreement with Burn Center
26	Acute Spinal Cord Management - (Transfer Agreement at Regional Trauma Center)
27	Quality/Performance Improvement Program
28	Participation In the State Trauma Registry
29	Audit Of All Trauma Deaths
30	Medical Staff Peer Review
31	Medical Nursing Audit

“The Map”



Process Improvement

Checklists

ALLERGIES	MEDS Anti-coags
TRAUMA	
<input type="checkbox"/> Airway Controlled	Activate?/FLIGHT
<input type="checkbox"/> <u>Breathing managed</u>	<u>Chest tube/needle</u>
<input type="checkbox"/> Bleeding Stopped	Pelvis IV/IO Access Monitors
<input type="checkbox"/> <u>Neuro Quick</u>	
<input type="checkbox"/> EXPOSE	<u>WARM</u>
<input type="checkbox"/> <u>BLOOD/FFP/CRYO</u>	
<input type="checkbox"/> TXA TDAP ABX	
<input type="checkbox"/> Position	
<input type="checkbox"/> <u>IMAGING</u>	<u>LABS/COAGS</u>

- Crew (Cockpit) Resource Management Training-mock codes
- Cryoprecipitate-evaluating as a component for balanced resuscitation and coagulopathy reversal

EMS Data collection

Assess protocol
Scene times
Care trends

Ambulance	Dispatch Time	En Route	At Scene	To Destination	At Destination	Response Time	Scene Time	Scene Time < 20 mins?	Receiving Facility	Male/Female	Patient Age	Call Classification	Chief Complaint	ALS/BLS	IV Attempts	IV Successes	IV Established	Medication Provided	Vitals Complete	911/Transfer	Driver	Attendant #1	Attendant #2	Notes	Trip Sheet Completed?
A3	2150	2200	2204	2219	2332	10 min	14 min	yes	Benefis	Female	67	Medical	Dizziness/H/A	ALS	1	1	20 G	Drip	Yes	Transfer	CB	AA		Hypertensive Event	Yes
A3	1155	1204	1206	1224	1230	9 min	8 min	yes	PMC	Male	73	Medical	Altered LOC	ALS	1	1	20 G	none	Yes	911	RE	RO		Altered LOC	Yes
A3	2006	2011	2016	2043	2050	5 min	27 min	no	PMC	Female	62	Medical	Weakness	BLS	1	1	20 G	none	Yes	911	RE	SR	DR	Hyperglycemia	Yes
A3	0552	0614	0618	0714	0826	22 min	56 min	no	Benefis	Female	78	Medical	Abd pain	ALS	1	1	22 G	Fentanyl,Zyosin	Yes	Transfer	DR	CS		Abd pain	Yes
A3	1728	1733	1736	1754	1854	5 min	18 min	yes	Benefis	Female	28	Medical	pneumonia	ALS	1	1	18 G	none	Yes	Transfer	CB	AA		Pneumonia	Yes
A3	1538	1544	1549	1611	1619	5 min	22 min	no	PMC	Female	40	Medical	Chest Pain	ALS	0	0	0	none	Yes	911	MK	AA	DR	Chest pain	Yes
A3	2039	2045	2047	2103	2106	6 min	19 min	no	PMC	Male	57	Trauma	fall/dizziness	ALS	1	1	18G	none	Yes	911	RE	CS	DR	ETOH/Fall	Yes
A3	1929	1937	1939	1952	1953	8 min	13 min	yes	PMC	Male	16	Trauma	neck pain	BLS	0	0	0	none	Yes	911	RE	CS	DR	wrestling/neck pain	Yes
A3	0601	0627	0631	0651	0756	26 min	20 min	no	Benefis	Male	75	Medical	Weakness	ALS	1	1	20 G	Atropine	Yes	Transfer	DR	CS		Bradycardia	Yes
A3	1557	1607	1611	1630	1730	10 min	19 min	yes	Benefis	Female	12	Trauma	Abd pain	ALS	1	1	20 G	Ativan	Yes	Transfer	DR	CS		kicked by horse	Yes
A3	0244	0253	0255	0300	0305	9 min	5 min	yes	PMC	Male	36	Medical	Abd pain	BLS	0	0	0	none	Yes	911	RE	CS	DR	vomiting/nausea	Yes
A2	1708	1714	1716	1735	1812	6 min	19 min	yes	MMC	Female	75	Medical	nose bleed	BLS	0	0	0	none	Yes	911	AM	FT	JS	severe nosebleed	Yes
A3	0156	0205	0206	0215	0220	9 min	11 min	yes	PMC	Male	24	Trauma	pain/laceration	BLS	0	0	0	none	Yes	911	CB	RO	MK	MVA/lacerations	Yes

ER Data collection

- ⦿ Review complications, opportunities to improve, QI filter fall outs
- ⦿ Is it a trend? Do we need a new QI filter
- ⦿ Decide action and document
- ⦿ Benchmark data
- ⦿ Continually evaluate and close the loop

Looking at undertriage

- ◉ Pre-hospital notification-EMS radio report with color coded trauma activation indicators
- ◉ Mechanism of injury- refer to Montana Field Trauma Decision Guide
- ◉ Patient falls with significant injury-trauma flow sheet

2015 Ghost Out

Homecoming Week
9/17/15

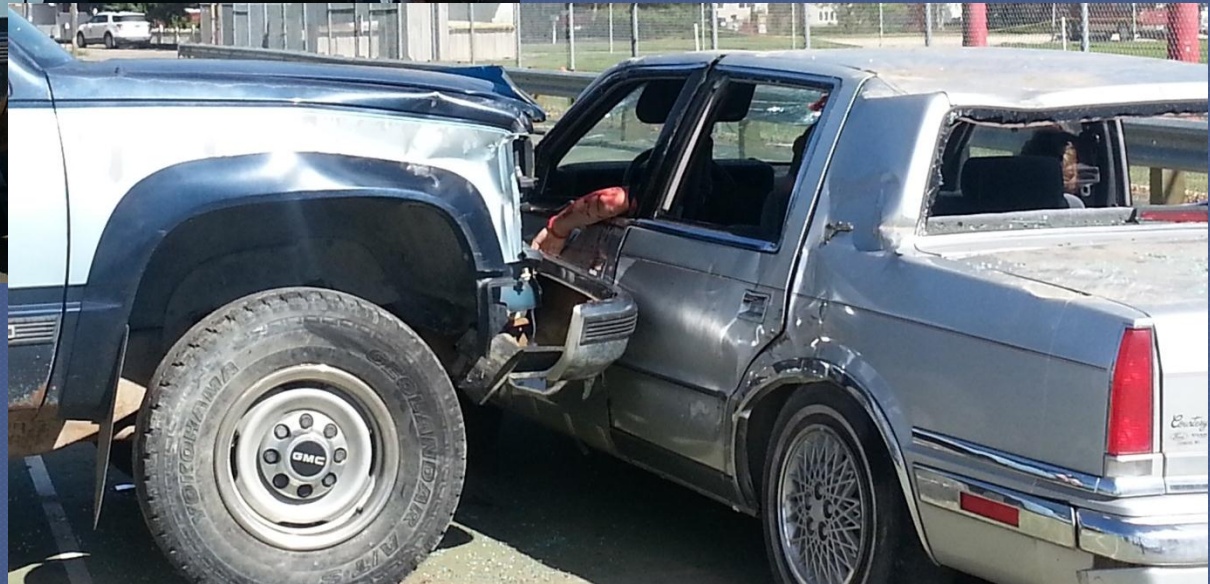


How to move your trauma
program into the community to
make a difference

Getting started

- ◉ Network with DUI Taskforce, Pondera County Health Department, Local law enforcement, County Attorney, Conrad School District
- ◉ Ask for permission from school board
- ◉ Faculty and Student support
- ◉ Mission statement
- ◉ Planning and coordination

Making an impact with students



Sending an important message about impaired driving and the consequences



Educating students on the reality of bad decisions

